

STATEMENT OF BASIS

as required by LAC 33:IX.3109, for draft **Louisiana Pollutant Discharge Elimination System Permit No. LA0049905; AI 41002; PER20090002** to discharge to waters of the State of Louisiana as per LAC 33:IX.2311.

The **permitting authority** for the Louisiana Pollutant Discharge Elimination System (LPDES) is:

Louisiana Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, Louisiana 70821-4313

- I. **THE APPLICANT IS:** Town of Chatham
Chatham Wastewater Treatment Facility
P.O. Box 7
Chatham, LA 71226

- II. **PREPARED BY:** Rachel Davis

- DATE PREPARED:** March 17, 2010

- III. **PERMIT ACTION:** reissue LPDES permit LA0049905, AI 41002; PER20090002

- LPDES application received: December 2, 2009

- EPA has not retained enforcement authority.
- LPDES permit issued: June 1, 2005
- LPDES permit expired: May 31, 2010

IV. **FACILITY INFORMATION:**

- A. The application is for the discharge of treated sanitary wastewater from a publicly owned treatment works serving the Town of Chatham.

- B. The permit application does not indicate the receipt of industrial wastewater.

- C. The facility is located at 6782 Hwy 34 in Chatham, Jackson Parish.

- D. The treatment facility consists of an extended aeration sewage treatment plant with tertiary filtration and disinfection.

E. Outfall 001

Discharge Location: Latitude 32° 18' 41" North
 Longitude 92° 26' 34" West

Description: treated sanitary wastewater

Design Capacity: 0.1 MGD

Type of Flow Measurement which the facility is currently using:
Totalizing Meter

Statement of Basis

LA0049905, AI 41002, PER20090002

Page 2

V. RECEIVING WATERS:

The discharge is into Edwards Branch, thence into Castor Creek, thence into Little River in segment 081501 of the Ouachita River Basin. This segment is not listed on the 303(d) list of impaired waterbodies.

The designated uses and degree of support for Segment 081501 of the Ouachita River Basin are as indicated in the table below^{1/}.

Degree of Support of Each Use						
Primary Contact Recreation	Secondary Contact Recreation	Propagation of Fish & Wildlife	Outstanding Natural Resource Water	Drinking Water Supply	Shell fish Propagation	Agriculture
Fully Supported	Fully Supported	Not Supported	N/A	N/A	N/A	N/A

^{1/}The designated uses and degree of support for Segment 081501 of the Ouachita River Basin are as indicated in LAC 33:IX.1123.C.3, Table (3) and the 2006 Water Quality Management Plan, Water Quality Inventory Integrated Report, Appendix A, respectively.

VI. ENDANGERED SPECIES:

The receiving waterbody, Subsegment 081501 of the Ouachita River Basin, is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U. S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated January 11, 2010 from Rieck (FWS) to Nolan (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. It was determined that the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat.

VII. HISTORIC SITES:

The discharge is from an existing facility location, which does not include an expansion beyond the existing perimeter. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the 'Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits' no consultation with the Louisiana State Historic Preservation Officer is required.

VIII. PUBLIC NOTICE:

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List

Statement of Basis

LA0049905; AI 41002; PER20090002

Page 3

For additional information, contact:

Ms. Rachel Davis
 Water Permits Division
 Department of Environmental Quality
 Office of Environmental Services
 P. O. Box 4313
 Baton Rouge, Louisiana 70821-4313

IX. PROPOSED PERMIT LIMITS:**Final Effluent Limits:**

Subsegment 081501, Castor Creek-Headwaters to Little River, is not listed on LDEQ's Final 2006 303(d) list as impaired. However, subsegment 081501 was previously listed as impaired for organic enrichment/low DO, TDS, and Chlorides, for which the below TMDL's have been developed. The Department of Environmental Quality reserves the right to impose more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving water bodies based upon additional TMDL's and/or water quality studies. The DEQ also reserves the right to modify or revoke and reissue this permit based upon any changes to established TMDL's for this discharge, or to accommodate for pollutant trading provisions in approved TMDL watersheds as necessary to achieve compliance with water quality standards.

The following TMDL's have been established for subsegment 081501:

Castor Creek Watershed TMDL for Biological oxygen-demand substances

The Waste Load Allocations(WLAs) for minor point source represent the load from the small oxygen demanding discharges that were not explicitly modeled. In general, these WLA's were based on current permit limits with no reductions. Therefore, since no point sources were modeled, the organic enrichment/low DO limitations will be permitted according to the current state policy.

Castor Creek Watershed TMDL for biological Chlorides and Salinity/ Total dissolved solids (TDS) subsegment 081501

As per the TMDL, a miniscule portion of the overall flow is being contributed by point sources it can be surmised that the waste water dischargers in the watershed have no real impact on the overall loading of chlorides and TDS to Castor Creek. Therefore, Limitations for chlorides and TDS will not be included in the permit.

OUTFALL 001

Final limits shall become effective on the effective date of the permit and expire on the expiration date of the permit.

Effluent Characteristic	Monthly Avg. (lbs./day)	Monthly Avg.	Weekly Avg.	Basis
BOD ₅	8.3	10 mg/l	15 mg/l	Limits are set in accordance with the Statewide Sanitary Effluent Limitations Policy (SSELP) for facilities of this treatment type and size.

Statement of Basis

LA0049905; AI 41002; PER20090002

Page 4

Effluent Characteristic	Monthly Avg. (lbs./day)	Monthly Avg.	Weekly Avg.	Basis
TSS	12.5	15 mg/l	23 mg/l	Since there is no numeric water quality criterion for TSS, and in accordance with the current Water Quality Management Plan, the TSS effluent limitations shall be based on a case-by-case evaluation of the treatment technology being utilized at a facility. Therefore, a Technology Based Limit has been established through Best Professional Judgement for the type of treatment technology utilized at this facility.

Other Effluent Limitations:**1) Fecal Coliform**

The discharge from this facility is into a water body which has a designated use of Primary Contact Recreation. According to LAC 33:IX.1113.C.5., the fecal coliform standards for this water body are 200/100 ml and 400/100 ml. Therefore, the limits of 200/100 ml (Monthly Average) and 400/100 ml (Weekly Average) are proposed as Fecal Coliform limits in the permit. These limits are being proposed through Best Professional Judgement in order to ensure that the water body standards are not exceeded, and due to the fact that existing facilities have demonstrated an ability to comply with these limitations using present available technology.

2) pH

According to LAC 33:IX.3705.A.1., POTW's must treat to at least secondary levels. Therefore, in accordance with LAC 33:IX.5905.C., the pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time.

3) Solids and Foam

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

X. PREVIOUS PERMITS:

LPDES Permit No. LA0049905: Issued: June 1, 2005
Expired: May 31, 2010

Statement of Basis

LA0049905; AI 41002; PER20090002

Page 5

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>		<u>Monitoring Requirements</u>	
	<u>Monthly Avg.</u>	<u>Weekly Avg.</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
Flow	Report	Report	Continuous	Recorder
BOD ₅	10 mg/l	15 mg/l	2/month	Grab
TSS	15 mg/l	23 mg/l	2/month	Grab
Fecal Coliform Colonies	200	400	2/month	Grab

XI. ENFORCEMENT AND SURVEILLANCE ACTIONS:A) **Inspections**

A review of the files indicates the following inspections were performed during the period beginning **May 2007** and ending **September 2009** for this facility.

Date: May 21, 2007

Inspector: Madelon Carter

EDMS Document No.: 35982599

Findings and/or Violations:

1. The fecal coliform limitation was exceeded for the months of 7/06, 8/06, 9/06, 10/06, 11/06, 12/06, 1/07, and 2/07
2. BOD limitations exceeded for 10/06, 1/07, 2/07
3. TSS was exceeded for 10/06
4. There was no totalizing meter present as required by the permit.

Date: March 17, 2008

Inspector: Madelon Carter

EDMS Document No.: 36687698

Findings and/or Violations:

1. A sample analysis report was revealed which stated that a fecal coliform sample was taken by a lb on 3/1/06 with a result of 2100 col/100mg/l
2. Permit limitations for BOD and TSS were listed incorrectly on the DMRs
3. A response letter/documentation was not present or revealed which stated flow measurement data for the monitoring permit within 30 days after receipt of the compliance order.

B) **Compliance and/or Administrative Orders**

A review of the files indicates the following most recent enforcement actions administered against this facility:

LDEQ Issuance:

Docket #: WE-CN-06-0356

Date Issued: November 5, 2007

Findings of Fact:

1. failed to submit timely permit renewal application
2. Many DMR excursions
3. Facility submitted incomplete or inaccurate DMR
4. Facility failed to sample as required
5. Facility not measuring flow as required

Statement of Basis

LA0049905; AI 41002; PER20090002

Page 6

Order:

1. Achieve and maintain compliance with permit limitations and conditions in the permit
2. Properly complete DMR's
3. Written report that includes a description surrounding the violations

C) DMR Review

A review of the discharge monitoring reports for the period beginning **September 2007** through **September 2009** has revealed the following violations:

Period of Excursion	Parameter	Outfall	Permit Limit	Reported Quantity
September 2007	Fecal	001	400	880
November 2007	Fecal	001	400	1000
December 2007	BOD	001	10 mg/l	36 mg/l
	BOD		15 mg/l	61 mg/l
	TSS		15 mg/l	25 mg/l
	TSS		23 mg/l	34 mg/l
	Fecal		400	1000
January 2008	BOD	001	10 mg/l	61 mg/l
	BOD		15 mg/l	113 mg/l
	TSS		15 mg/l	78 mg/l
	TSS		23 mg/l	136 mg/l
	Fecal		200	2000
	Fecal		400	4000
February 2008	Fecal	001	400	800
March 2008	BOD	001	10 mg/l	17 mg/l
	BOD		15 mg/l	20 mg/l
	Fecal		400	2000
May 2008	Fecal	001	400	1000
July 2008	TSS	001	15 mg/l	18 mg/l
	TSS		23 mg/l	25 mg/l
	Fecal		400	800
September 2008	TSS	001	15 mg/l	18.8 mg/l
	TSS		23 mg/l	24 mg/l
October 2008	BOD	001	10 mg/l	22 mg/l
	BOD		15 mg/l	25 mg/l
	TSS		15 mg/l	34 mg/l
	TSS		23 mg/l	44 mg/l
	Fecal		200	3240
	Fecal		400	5250
March 2009	BOD	001	10 mg/l	12.2 mg/l
	BOD		15 mg/l	17.5 mg/l
	TSS		15 mg/l	17 mg/l
	TSS		23 mg/l	28 mg/l
May 2009	TSS	001	15 mg/l	30.5 mg/l
	TSS		23 mg/l	41 mg/l
June 2009	BOD	001	10 mg/l	29.6 mg/l
	BOD		15 mg/l	37.3 mg/l
	TSS		15 mg/l	173 mg/l
	TSS		23 mg/l	320 mg/l
	Fecal		400	1530

Statement of Basis

LA0049905; AI 41002; PER20090002

Page 7

July 2009	BOD	001	10 mg/l	408 mg/l
	BOD		15 mg/l	804 mg/l
	TSS		15 mg/l	2134 mg/l
	TSS		23 mg/l	4250 mg/l
	Fecal		200	612
	Fecal		400	3740
September 2009	TSS	001	15 mg/l	35.1 mg/l
	TSS		23 mg/l	44 mg/l

*Based on the numerous compliance issues noted, the Water Permits Division referred this facility to the Enforcement Division on March 17, 2010.

XII. ADDITIONAL INFORMATION:

The Louisiana Department of Environmental Quality (LDEQ) reserves the right to modify or revoke and reissue this permit based upon any changes to established TMDL's for this discharge, or to accommodate for pollutant trading provisions in approved TMDL watersheds as requested by the permittee and/or as necessary to achieve compliance with water quality standards. Therefore, prior to upgrading or expanding this facility, the permittee should contact the Department to determine the status of the work being done to establish future effluent limitations and additional permit conditions.

This permit may be modified, or alternatively, revoked and reissued, to comply with any applicable effluent standard or limitations issued or approved under sections 301(b)(2)(C) and (D); 304(b)(2); and 307(a)(2) of the Clean Water Act or more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving water bodies based upon additional water quality studies and/or TMDL's, if the effluent standard, limitations, water quality studies or TMDL's so issued or approved:

- a) Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
- b) Controls any pollutant not limited in the permit; or
- c) Requires reassessment due to change in 303(d) status of waterbody; or
- d) Incorporates the results of any total maximum daily load allocation, which may be approved for the receiving water body.

Please be aware that the Department has the authority to reduce monitoring frequencies when a permittee demonstrates two or more consecutive years of permit compliance. Monitoring frequencies established in LPDES permits are based on a number of factors, including but not limited to, the size of the discharge, the type of wastewater being discharged, the specific operations at the facility, past compliance history, similar facilities and best professional judgment of the reviewer. We encourage and invite each permittee to institute positive measures to ensure continued compliance with the LPDES permit, thereby qualifying for reduced monitoring frequencies upon permit reissuance. If the Department can be of any assistance in this area, please do not hesitate to contact us. As a reminder, the Department will also consider an increase in monitoring frequency upon permit reissuance when the permittee demonstrates continued non-compliance.

Final effluent loadings (i.e. lbs/day) have been established based upon the permit limit concentrations and the design capacity of 0.1 MGD.

Effluent loadings are calculated using the following example:

$$\text{BOD: } 8.34 \text{ lb/gal} \times 0.1 \text{ MGD} \times 10 \text{ mg/l} = 8.3 \text{ lb/day}$$

Statement of Basis

LA0049905, AI 41002, PER20090002

Page 8

At present, the **Monitoring Requirements, Sample Types, and Frequency of Sampling** as shown in the permit are standard for facilities of flows between 0.1 and 0.5 MGD.

Effluent CharacteristicsMonitoring Requirements

	<u>Measurement</u> <u>Frequency</u>	<u>Sample</u> <u>Type</u>
Flow	Continuous	Recorder
BOD ₅	2/month	Grab
Total Suspended Solids	2/month	Grab
Fecal Coliform Bacteria	2/month	Grab
pH	2/month	Grab

Pretreatment Requirements

Based upon consultation with LDEQ pretreatment personnel, it is recommended that LDEQ Option 1 Pretreatment Language be included in LPDES Permit LA0049905.

This language is established for municipalities that do not have either an approved or required Pretreatment program. This recommendation is in accordance with 40 CFR Part 403 regulations, the General Pretreatment Regulations for Existing and New Sources of Pollution contained in LAC Title 33, Part IX, Chapter 61 and the Best Professional Judgement (BPJ) of the reviewer.

Pollution Prevention Requirements

The permittee shall institute or continue programs directed towards pollution prevention. The permittee shall institute or continue programs to improve the operating efficiency and extend the useful life of the facility. The permittee will complete an annual Environmental Audit Report **each year** for the life of this permit according to the schedule below. The permittee will accomplish this requirement by completing an Environmental Audit Form which has been attached to the permit. All other requirements of the Municipal Wastewater Pollution Prevention Program are contained in Part II of the permit.

The audit evaluation period is as follows.

Audit Period Begins	Audit Period Ends	Audit Report Completion Date
Effective Date of Permit	12 Months from Audit Period Beginning Date	3 Months from Audit Period Ending Date

Sewage Sludge

Part II, Section D requires that any truck disposing of hauled sewage sludge must be properly registered by the Louisiana Department of Environmental Quality (LDEQ) to haul sewage sludge. The receipt of hauled sewage sludge from an unauthorized/unregistered hauler shall constitute a violation of the permit.

XIII. TENTATIVE DETERMINATION:

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to reissue a permit for the discharge described in this Statement of Basis.

Statement of Basis

LA0049905; AI 41002; PER20090002

Page 9

XIV. REFERENCES:

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 8, "Wasteload Allocations / Total Maximum Daily Loads and Effluent Limitations Policy," Louisiana Department of Environmental Quality, 2009.

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 5, "Water Quality Inventory Section 305(b) Report," Louisiana Department of Environmental Quality, 2006.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Chapter 11 - "Louisiana Surface Water Quality Standards," Louisiana Department of Environmental Quality, 2009.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Subpart 2 - "The LPDES Program," Louisiana Department of Environmental Quality, 2009.

Low-Flow Characteristics of Louisiana Streams, Water Resources Technical Report No. 22, United States Department of the Interior, Geological Survey, 1980.

Index to Surface Water Data in Louisiana, Water Resources Basic Records Report No. 17, United States Department of the Interior, Geological Survey, 1989.

LPDES Permit Application to Discharge Wastewater, Town of Chatham, Chatham Wastewater Treatment Facility, December 2, 2009.